

extracts had to have them because it was said they professed to "cure," yet certain brands of soap which also set out to "prevent and cure" diseases did not bear a stamp.

The Chairman inquired whether the words on the wrappers around the articles came within the provisions of the Acts.

The witness said he had never heard of a prosecution. The Act said, "Wilfully calls on the label." It would depend whether the magistrate considered the wrapper stood for a label.

The Chairman: I would suggest that the reason there have been no prosecutions is because the authorities do not want to add to their burdens.

Witness put forward as a suggestion that persons who advised others through the post ought to be liable to prosecution. That was really a matter for the Apothecaries' Society. He was not aware that the British Medical Association had ever endeavoured to get the society to take such cases up.

Replying to Mr. Bathurst, witness said the Commissioners did not allow the "dispensing exemptions" to doctors. He supposed it was because they were not in the habit of using medicine stamps.

Mr. Bathurst: Supposing a doctor—as many of them do in the country—carries out this own dispensing, he would not be able to supply unstamped articles, like the chemist?

Witness: That is so.

Answering Mr. Glyn Jones, Mr. Kirby said that in the case of packets the stamp was put on the package; that enabled the single articles to be sold without them. He was aware that that provision applied to articles which a chemist himself put up. It would, of course, be difficult in that case to detect any fraud as regards stamping. He had heard of the practice of selling well-known pills in pennyworths, and that had led to prosecutions by the proprietors for fraudulent substitution.

Mr. Glyn Jones: It has been suggested that it would be wise in the case of certain proprietary medicines, where it was known that a dangerous poison was present, that the ingredients should appear on the label. If such ingredients appeared in the Poison Schedule would it not bring about the same result?

The Witness: No, not quite. The practice at present is to put the word "poison" on the label and not name the ingredient.

Mr. Glyn Jones: The word "poison" appears on the wrapper?

Witness: Yes.

Mr. Glyn Jones: Simply that one word, without any reference to what it contains?

Witness: That is so.

Mr. Glyn Jones: Excepting for deciding that the word refers to that particular article on which it appears, the scheduling would do just the same.

Mr. Lynch: Do you think that a stamp conveys a false impression to the public?

Witness: I have heard that said, but I do not know on what grounds.

Mr. Lynch: Have you any suggestions for making the law more effective?

Witness: No, I am not making any suggestions in that sense, except that the regulations might be revised and put into more modern language.

The Chairman: Are you prepared to say that the present state of things constitutes a financial and legal chaos?

Witness: Perhaps that phrase meets it. (Laughter.) He believed the Commissioners could get more revenue if the Act were more properly enforced. He could not say whether the recent increase in the revenue was due to more vigilance on the part of the Commissioners or increased sales. There were some eight or ten works containing formulae of approved medicines, and in them there were about 20,000 mentioned.

The Chairman: There is no one standard; the Commissioners accept a variety of standards from a variety of sources?

Witness: Yes.

Referring to exemptions, witness said he did not think the powers were misused. He thought, however, the Commissioners might enforce the Act more than they did.

The foreign medicines were treated in exactly the same way as medicines produced in England.

The Chairman: Then it is not a question of protecting home industries. If the Commissioners "spread their net" a little more they would get more revenue.

The Committee adjourned for the Parliamentary recess.

FIRST INTERNATIONAL EUGENICS CONGRESS.

THE First International Eugenics Congress has been held during the last week in London. The proceedings opened on Wednesday, July 24th, with a banquet at the Hotel Cecil, Mr. A. J. BALFOUR being the principal speaker. In his opening words he justified the holding of the Congress by contending that its duty was to convince the public that the study of eugenics was one of the greatest and most pressing necessities of our day. A useful caution was added. The Congress had got to persuade the ordinary man that the task science had set itself was one of the most difficult and complex it had ever undertaken. Eugenics, he said, depended upon facts which ought not to be difficult to verify; it depended upon premisses whose conclusions followed almost inevitably, and those who roughly or contemptuously put aside all those prophecies of ill to the civilization of the future were bound to give the closest scrutiny to the arguments before they rejected them, and to show when and how and in what particulars they failed to support the conclusions drawn from them. After referring to the differences of opinion existing among men of science, he reminded them that eugenics suffered from the fact that every faddist seized hold of the eugenic problem as the machinery for furthering his own particular method of bringing the millennium upon earth.

Official proceedings opened with the address of the President, Major LEONARD DARWIN. There was, he said, one agency which had had a great influence in the past—Natural Selection—Nature playing the part of the breeder of cattle refusing to breed from inferior stocks. It seemed as if the forward movement thus engendered had gone on since life first appeared on the earth until recent times when by social methods everything possible had been done to prevent progress being made by these means. He spoke of the danger of interfering with Nature's ways, and said that they must proclaim aloud that to give themselves the satisfaction of succouring their neighbour in distress without at the same time considering the effects likely to be produced by their charity on future generations was to say the least but weakness and folly. Their first effort must be to establish such a moral code as would ensure that the welfare of the unborn should be kept in view in connexion with all questions concerning both the marriage of the individual and the organization of the State. They should hope that the twentieth century would be known in future as the century when the eugenic ideal was accepted as part of the creed of civilization.

The Inheritance of Fecundity.

In the morning session (Thursday) a paper was read by Dr. RAYMOND PEARL, of the Maine Agricultural Experimental Station, on "The Inheritance of Fecundity," which was characterized by Professor Punnett as the most important paper that would be read at the conference. Dr. Pearl described the results of an investigation into the mode of inheritance of fecundity in the domestic fowl, and showed that while the continued selection over a period of years of highly fecund females failed to bring about any change in average fecundity of the strain used, the character must nevertheless be inherited, since pedigree lines had been inherited which uniformly bred true to definite degrees of fecundity. Differences in degrees of fecundity (number of eggs laid) did not depend upon anatomical differences in respect to the number of visible oocytes in the ovary, and the differential factor on which the variations in fecundity depended must be primarily physiological. Fecundity in the fowl, it was then claimed, was inherited in strict accord with the Mendelian plan, for observed individual variations in fecundity depended essentially upon two separately inherited physiological factors; high fecundity was manifested only when both of the factors were present together in the same individual; either of the factors when present alone caused about the same degree of low fecundity to be manifested; one of the factors was sex-correlated in its

inheritance in such a way that in gametogenesis any gamete bearing the female sex determinant was debarred from bearing one of the fecundity factors, and there was thus a definite and clear-cut segregation of high fecundity from low fecundity. The speaker suggested that the results submitted might offer a method of attacking the same problem for man.

Feeble-Mindedness.

In the afternoon session Professor PUNNETT contended that precise knowledge was at present available for man in relatively few characters. The one instance of eugenic importance that could be brought under immediate control was that of feeble-mindedness. The evidence available suggested that it was a case of single Mendelian inheritance. There was every reason to expect that a policy of strict segregation would rapidly bring about the elimination of this character.

Inheritance of Epilepsy.

In a paper on the inheritance of epilepsy, Dr. D. F. WEEKS, Medical Superintendent of the New Jersey State Village for Epileptics at Skillman, attempted to define what laws epilepsy followed in its return to successive generations and to determine the relation it bore to alcoholism, migraine, paralysis, and other symptoms of lack of neural strength. His conclusions were that the common types of epileptics lacked some element necessary for complete mental development, being in this way comparable with the feeble-minded; that two epileptic parents produced only defectives, mental defect occurring when both parents were either epileptic or feeble-minded; that epilepsy tended in successive generations to form a larger part of the population; that the normal parents of epileptics were not normal but simplex, and had descended from tainted ancestors; that alcohol might be a cause of defect in that more children of alcoholic parents were defective than where alcoholism was not a factor; and that neurotic and other tainted conditions were closely allied with epilepsy. He contended that in the light of present knowledge epilepsy considered by itself was not a Mendelian factor, but that epilepsy and feeble-mindedness were Mendelian factors of the recessive type.

Influence of Age of Parents.

In discussing the influence of the age of the parents on psycho-physical characteristics of the children, Professor ANTONIO MAZZO, Director of the Lunatic Asylum at Turin, contended that the children of youthful parents showed pre-eminently the qualities of youth. Assassins, homicides, those who showed the most complete absence of sentiments of affection and often delusions of persecution gave a proportion of children of aged parents far greater than that furnished by all the other categories of delinquents.

Maternity Statistics.

Mr. HOFFMANN (Statistician of the Prudential Insurance Company of America) opened Friday's meeting with an account of the maternity statistics of Rhode Island. His figures related to the year 1905, and a selection of them can be best presented in a table.

	Per Cent.
Native-born married women	... 71.6 mothers
" " " "	... 28.4 childless
Foreign-born " " "	... 82.5 mothers
" " " "	... 17.5 childless
Protestant " " "	... 72.7 mothers
Roman Catholic " " "	... 80.3 "
Jewish " " "	... 88.0 "

Discussing the question in connexion with the different ages of parenthood, he showed that a similar disproportion was apparent. This must be regarded as the most alarming tendency in American life; it was evidence of physical deterioration, and must have a lasting effect upon national life and character.

Mr. C. B. DAVENPORT, discussing marriage and eugenics, considered the laws limiting freedom of marriage. Three were of biological import—the limitation of relationship between the mates, the limitations in mental capacity of the mates, and limitations of race. There was, he said, biological justification for limiting cousin marriages in so far as they were apt to bring in from both sides of the house the same defect; and while the prohibition of cousin marriages was doubtless a rough eugenic measure, it would be better if it were qualified so as to forbid the marriage of cousins when, in the parental fraternity com-

mon to both, there was a case of inability to learn at school, of dementia praecox, of epilepsy, congenital deafness, albinism or cleft palate. While the only way to prevent the reproduction of the feeble-minded was to sterilize or segregate them, it was unwise to refuse marriage to the insane without qualification. Two mentally normal persons who had each an insane parent were more apt to have insane offspring than an insane person who married one in whom there was no taint of insanity. It might be unwise to deny to every person who had shown a tendency to manic depressive, or insanity in its lighter forms, marriage into mentally sound stock. The requirement of a physician's certificate as to bodily soundness demanded by some clergymen in the States was primarily directed towards venereal disease, and certainly had eugenical bearings. When a requirement was made of a certificate that both parties came of mentally and physically sound stock a still more important step in eugenics would have been taken. He advocated strongly that in marriage questions the law should take lessons from biology, and so avert many of the disasters that were feared.

Practical Measures in America.

The session on Friday afternoon was opened by Mr. BLEECKER VAN WAGENEN, who presented the preliminary report of the Committee of the Eugenic Section of the American Breeders' Association to study and report on the best practical means for cutting off the defective germ-plasm in the human population. In eight of the States of the Union there were laws authorizing or requiring sterilization of certain classes of defectives and degenerates. A considerable quantity of evidence is contained in the report, and the conclusions which the committee regard as indicated are that the sterilization of the adult male by vasectomy is a simple, practicable method of preventing procreation by him without otherwise interfering with his sexual functions, but that it is not certainly permanent, castration only being sure; that sterilization of the adult female by either salpingectomy, ovariectomy, or hysterectomy, or all three, is never wholly free from danger to life or disturbance of other bodily or mental functions; that sterilization of adults by any of these processes did not appear greatly to modify previous sex characteristics and habits; that in females sexual passions were sometimes increased, in males more often they were somewhat mitigated; that there was no probability that in this way sexual immorality would be increased; that knowledge was as yet so limited that only a few types could be safely selected as suitable for compulsory sterilization; that vasectomy might become a eugenic measure of considerable value if practised under the general protection of law, but by persuasion and with the consent of the individual unfitted for parenthood; that the sterilization laws already enacted in the United States would have to undergo vigorous attacks in the highest courts before many more compulsory operations were performed, with the probability that there would eventually be material modifications of them.

Education and Eugenics.

Dr. F. C. S. SCHILLER (Oxford) on Saturday raised the whole question of education and eugenics. He criticized the present educational system, and suggested that it might be practicable to substitute an ideal of general fitness for that of athletic fitness. As society was constituted at present, talent was drained from all the classes to the top, and then tended to be eliminated.

Interchange between the Classes.

On Monday, after drawing attention to the cause of the inferiority of physical and mental characters in the lower social classes, Professor NICEFORO (Naples) claimed that in the mass of men belonging to the superior classes were found a small number of men with inferior qualities, while in the mass of men forming the inferior classes were found a certain number of persons possessing superior characters. It was, he argued, between these two exceptional categories that social exchanges should be made, allowing the best and most capable of the lower stratum to ascend, and compelling the unadapted who were found above to fall to the lower stratum.

M. LUCIEN MARCH, Director of General Statistics in France, considered in this connexion some of the results

of the French census returns of 1906. One of his most important conclusions was that it did not appear that in France casual and unskilled labourers, persons in the receipt of Poor Law relief, and so forth, were especially prolific. But even among the working classes the most highly paid occupations were not those in which were found the greatest number of children. The economic, social, or moral burden of children was a factor bound up in a complex manner, not only with the individual conditions of existence, but also with the transformation of society, progress in manners and customs, and the conception formed of life.

Historical Research.

The most striking paper of the afternoon session was by Sir FREDERICK ADAMS WOODS on "Some Inter-relations between Eugenics and Historical Research." Arguing from his researches into the records of royal families and of those who had been elected to the Hall of Fame, he said that among 832 members of the various royal families at least 20 exhibited a genius entitling them to rank intellectually with those included in the studies of Galton and Ellis. This percentage was more than twenty thousand times as high as it was among the masses. The figures relating to the Hall of Fame showed that the amount of distinguished relationship was about a thousand times the random expectation. He concluded by making a strong appeal that the human record should be used to contribute to the improvement of the human breed.

Death-rate During Development.

Dr. CORRADO GINI, Professor of Statistics in the University of Cagliari, drew attention to the heavy death-rate shown during development by the human race. It did not appear possible, he said, to show any correlation between the frequency of multiple births, of miscarriages, or of stillbirths, nor between the length of life of the offspring and their intellectual capacity and the season of conception. The frequency of stillbirths, however, and the length of life of the offspring showed a clear correlation with the season of birth in the sense that those born in temperate seasons showed a lower rate for stillbirths and a greater length of life. The age of the mother at the time of marriage exercised a decisive influence upon the vitality of the offspring—the greater the age of the mother at the time of marriage, the less being the vitality of the children. The influence of the father's age was less intense, but similar. Persons who died at a more advanced age had children in greater number and endowed with greater length of life, and for some classes of the unfit (mad, consumptives, and suicides) it could be proved beyond question that the number of children born was less and their mortality greater than among married people generally.

Prophylaxis of Syphilis.

Tuesday, the concluding day of the session, was devoted to some points connected with the medical aspect of eugenics.

The session opened with a paper on "The Prophylaxis of Hereditary Syphilis and its Eugenic Action," by Dr. HALLOPEAU, the Congress, as it had done in a previous discussion on Militarism and Eugenics, emphasizing the view that they should take every possible step to rid the community of the disease. The paper and the discussion did not follow on any very novel lines, the most important practical suggestion being that it would be well for the army practice of giving instruction to the troops as to venereal disease being extended to the Territorials, with a view of spreading accurate knowledge on the subject.

Eugenics, Alcohol, and Insanity.

The papers that followed, dealing with the influence of alcohol, were of more interest, particularly that of Dr. ALFRED MJØEN (Kristiania). Starting with the proposition that the injurious effect of an alcoholic beverage upon individuals or races increased from a certain percentage progressively with the increasing contents of alcohol, he advocated the division of alcoholic drinks into classes, the sale of low percentage drinks being encouraged by low duties and that of high percentage being discouraged by high duties. Legislation to that effect, he said, had, after a long struggle, just been carried through the Norwegian Storting. In the course of the ensuing dis-

cussion, Dr. PLOETZ said that he intended to use every effort to get similar legislation carried in Germany.

Dr. F. W. MOTT discussed "Heredity and Eugenics in Relation to Insanity." He attributed the increase of registered insanity in London to administrative causes, and discussed particularly heredity as a cause of insanity. Among the 20,000 inmates at present resident in the London County Council Asylums, 715 were so closely related as parents and offspring or brothers and sisters. Seeing that the unfit were at present able to survive, it was an important question whether Nature ended or mended degenerate stocks, or whether the lives of neuropathic inheritance had only been partially cut off by the tendency to anticipation. It was urgently necessary to know what was the fate of all the offspring of an insane parent or parents, for there were many facts showing that a disease might be latent and reappear in a stock when the conditions of mating or environment were unfavourable. As a result of an analysis of pedigrees with a dual neuropathic inheritance of paternal and maternal stocks compared with single neuropathic inheritance, he concluded that a child born of neuropathic inheritance in both ancestral stocks stood on an average four times as great a chance of being insane as when only one stock was infected.

Sir GEORGE SAVAGE took part in the discussion, and argued that insanity had to be looked on as similar to genius; neither condition bred true. There were forms of insanity that were not transmitted or transmissible. He reminded the members that disease could be bred out: if they eliminated all forms of neurosis they would reduce the world to a dead level of respectability, and make life hardly worth living.

In a paper by Mr. H. E. JORDAN it was argued that eugenics ought to find a place in the medical curriculum.

In concluding the Congress, Major DARWIN said he was sure he was interpreting the Congress correctly in pleading that the elimination of the feeble-minded was a policy that they felt should be kept in the forefront of their programme. He thought they should give a well-defined meaning to the term "eugenics," and be careful not to neglect that field of heredity which they had undertaken to cultivate for reforms that gave more immediate promise. They had asked themselves the question, Was civilization to be progressive or retrograde? and their decision was that so far as lay within their power it should be progressive. In his opinion the thanks of posterity were due to them.

Several votes of thanks were passed at the conclusion of the Congress, especially to Major Darwin and to Mrs. Gotto.

Appeal by Eugenics Education Society.

As a result of the Congress a letter has been issued by the chief officers of the Congress appealing for funds. It was as follows:

Eugenics Education Society.

The widespread interest aroused by the International Congress makes this an opportune moment to appeal for support for the Eugenics Education Society. Every additional recruit, by joining that society, undoubtedly adds to its financial strength and to its prestige. But, highly desirable as is such an increase of numbers, all our needs are unlikely thus to be met, for an additional expenditure of at least £500 a year is essential in order to render possible what is now immediately and urgently required in the way of additional office accommodation, secretarial assistance, and educational lectures. Surely some of our wealthy and generous fellow-countrymen must see the necessity of establishing the eugenic movement on a permanent basis in order to ensure the progress of the nation, if not to guard against an actual retrograde movement. To them shall we appeal in vain?

THE National League for Physical Education and Improvement has recently added four new health leaflets to its well-known series, which has already met with so much appreciation both by public health authorities and by the ever-increasing number of voluntary health workers. One deals with cleanliness in the home, another with fresh air and ventilation, while the other two contain instructions on bringing up breast-fed and bottle-fed infants respectively. The latter were drawn up by the medical subcommittee of the Association of Infant Consultations and Schools for Mothers and by the Metropolitan Branch of the Society of Medical Officers of Health. Specimen copies will be sent on application to the Secretary of the League, 4, Tavistock Square, W.C., if a stamp is enclosed for postage.